

IN THE ABSTRACT:

Please replace the abstract at page 47 with the following new abstract as follows:

A transmission secondary electron emitter is provided which emits secondary electrons generated by the incidence of primary electrons. The transmission secondary electron emitter includes a secondary electron emitting layer which is made of diamond or a material containing diamond as a main component, and of which one surface is the surface of incidence for making the primary electrons incident thereon, and the other surface is the surface of emission for emitting the secondary electrons. Also included is a voltage applying arrangement for applying a predetermined voltage between the surfaces of the incidence and the emission of the secondary electron emitting layer to form an electric field in the secondary electron emitting layer.